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# (12) United States Patent

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## (54) METHODS AND APPARATUSES FOR FAST POWER CONTROL OF SIGNALS TRANSMITTED ON A MULTIPLE ACCESS CHANNEL

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## Related U.S. Application Data

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- (52) **U.S. Cl.** ...... **455/522**; 455/69; 455/13.4; 455/67.11

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#### (57) ABSTRACT

A method and apparatus for controlling the transmission of signals from one or more of a plurality of mobile stations to a base station on a plurality of M multiple access channels is described. A power control information packet formed from a plurality of power control bits is transmitted from the base station to the one or more mobile stations. Each of the power control bits in the power control information packet has a position that is mapped to a selected access channel and to a time offset within the selected access channel. The power control information packet is received at a first mobile station. A message is then transmitted from the first mobile station to the base station on a first access channel and at a first time offset associated with the first access channel.

### 16 Claims, 13 Drawing Sheets

